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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,320	02/22/2007	Ian Arthur Burston	T2211-12006US01	7621
7590 Miles & Stockbridge 1751 Pinnacle Drive Suite 500 McLean, VA 22102-3833	12/19/2007		EXAMINER BASINGER, SHERMAN D	
			ART UNIT 3617	PAPER NUMBER
			MAIL DATE 12/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/593,320	BURSTON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Sherman D. Basinger	3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-21 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 18 September 2006 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>2/22/07</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: ____

## **DETAILED ACTION**

1. The preliminary amendment has been received.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: in line 3 "what" should be changed to –when-. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 19, lines 3 and 4, "said means for giving buoyancy to the module when in use" has no clear antecedent.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7, 10-14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Acker.

For claim 1, Acker discloses a floating water surface cover module 10 for a water storage tailings facility comprising a rim portion 16 and a cover portion 14, means for giving buoyancy to the module when in use such that the rim portion is substantially submerged in the water (see figure 2), said cover portion being configured to define an air space above the water when in use (see figure 2), said buoyancy means including at least one air-filled buoyancy pocket 22 (also 32 or 44) associated with the rim and/or the cover portion, said rim and/or cover portion being configured to allow the module to be nested within and stacked with like modules for storage or transportation (see figure 4B or 4A).

For claim 19, Acker discloses a floating water surface cover module 10 for comprising a rim portion 16 and a cover portion 14, said cover portion being configured to define when in use an air space above the water with the rim partially submerged in the water (see figure 2), said means for giving buoyancy to the module when in use including at least one buoyancy pocket 22 (or 32 or 44) associated with the rim and/or the cover portion, said rim and/or cover portion being configured to allow the module to be nested within and stacked with like modules for storage or transportation (see figures 4A and 4B).

The outwardly stepped formation of the rim portion is shown in figures 2, 7 and 8.

The air filled pockets of claim 3 are 22. The limitation "each pocket configured to next in a corresponding indentation in the cover portion and/or rim portion when the modules are stacked" is an intended use and does not define any further structure of the pockets.

The open pocket of claim 4 is pocket 22. The limitation "adapted to be closed by a lid fixed to the cover and rim portions to define closed air-filled pocket(s)" defines an intended use of the pocket and does not add further structure of the pocket.

The vent of claim 6 is 26.

With regard to claim 7, see column 7, lines 26-30.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 9, 15-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker.

While Acker does not specifically disclose that the height (hr) of the rim and the depth (X) of the freeboard portion satisfies the relationship:

**0.1 ≤ X ≤ 0.3 (1), or that the diameter to height ratio of the rim (D:hr) and the diameter to height ratio of the domed cover (D:hd) are between 5:1 and 25:1,**

figures 2, 7 and 8 show that the height (hr) of the rim and the depth (X) of the freeboard portion nearly satisfies the relationship:

**0.1 ≤x ≤ 0.3 (1), and that the diameter to height ratio of the rim (D:hr) and the diameter to height ratio of the domed cover (D:hd) are nearly between 5:1 and 25:1.**

To modify the dimensions of the module of Acker such that the height (hr) of the rim and the depth (X) of the freeboard portion satisfy the relationship:

**0.1 ≤x ≤ 0.3 (1), and that the diameter to height ratio of the rim (D:hr) and the diameter to height ratio of the domed cover (D:hd) are between 5:1 and 25:1 would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.**

Motivation to make the above dimensional changes is to provide a solar heat collector which meets the requirements for use in a pool of a particular size.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Slonneger is cited to show the dome shaped device.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sherman Basinger/  
Sherman Basinger, PE  
Art Unit 3617

12/17/07